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| APPLICATION NO.                  | FILING DATE            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |
|----------------------------------|------------------------|----------------------|-------------------------|-----------------|
| 09/591,584                       | 06/09/2000             | Peter T Dietz        | 55434USA1A.002          | 2946            |
| 7590 06/22/2005                  |                        |                      | EXAMINER                |                 |
| Harold C Knecht III              |                        |                      | . VO, HAI               |                 |
| Office of Intelle                | ctual Property Counsel |                      |                         |                 |
| 3M Innovative Properties Company |                        |                      | ART UNIT                | PAPER NUMBER    |
| P O Box 33427                    |                        |                      | 1771                    |                 |
| St Paul, MN 55133                |                        |                      | DATE MAILED: 06/22/2005 |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ri.  | - BN   |   |  |  |  |  |
|--|--|---|--|--|--|--|
|  | Application No.  | Applicant(s)  |  |  |  |  |
| Office Action Cummons  | 09/591,584   | DIETZ, PETER T  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |
|  | Hai Vo   | 1771  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with   | h the correspondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).          | 66(a). In no event, however, may a re<br>within the statutory minimum of thirty<br>ill apply and will expire SIX (6) MONT<br>cause the application to become ABA | ply be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on 23 M  | av 2005.   |   |  |  |  |  |
|  | action is non-final.   | •   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |
| 4) ☐ Claim(s) 1-27 and 30-42 is/are pending in the a 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) 24-27,34 and 40 is/are allowed. 6) ☐ Claim(s) 1-15, 17-22, 31-33, 35, 38, 39, 41 and 7) ☐ Claim(s) 16,23,30,36 and 37 is/are objected to 8) ☐ Claim(s) are subject to restriction and/or  | vn from consideration.  1 42 is/are rejected.  |   |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |  |   |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |  |   |  |  |  |  |
| Attachment(s)  |  |   |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  |  | ummary (PTO-413)  |  |  |  |  |
| Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date      S. Patent and Trademark Office   |  | //Mail Date<br>formal Patent Application (PTO-152)<br>  |  |  |  |  |

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1. The art rejections over Hutchison et al (US 5,1 18,540) in view of Bilkadi et al (US 5,677,050) are withdrawn in view of the present amendment.

2. The indicated allowability of independent claims 1-11, 13-15, 17-22, 31-35, 38 and 39 is withdrawn in view of the present amendment.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38,39, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) substantially as set forth in the 06/17/2004 Examiner Answer.
- 5. Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1, in view of Tanaka et al (US 6,033,785) substantially as set forth in the 06/17/2004 Examiner Answer.
- 6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1 above, in view of Bilkadi et al (US 5,677,050) substantially as set forth in the 06/17/2004 Examiner Answer.

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- 7. Claims 14, 15, 22 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1 above, further in view of Yang et al (US 6,013,722) substantially as set forth in the 06/17/2004 Examiner Answer.
- 8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,1 18,540) in view of Murphy (US 4,157,417) and Bilkadi et al (US 5,677,050). Hutchison discloses a laminate having a construction in a following order: surface of solar energy/adhesive/polyester/polyester/adhesive/silver/adhesive/polyester (example 7). Hutchison teaches the polyester layer of the laminate being protected with a premask film prior to installation and during installation. Hutchison discloses the use of an acrylic pressure sensitive adhesive to bond the silver layer and the polyester. Hutchison is silent as to a scratch-resistant ceramer coating. Bilkadi supplies the missing feature. Bilkadi teaches a retroreflective sheeting having an abrasion resistant creamer coating (abstract). Bilkadi teaches that the ceramer coating works well on polyacrylics adhesive (column 4, lines 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the ceramer coating as taught in Bilkadi on the outer surface of the laminate motivated by the desire to provide the laminate with excellent in abrasion resistance and outdoor durability.

Hutchison does not specifically disclose the reflective film attached to window glass. Murphy, however, teaches the reflective film having been attached

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to window glass to reduce heat, glare of solar radiation to reduce heat, glare of solar radiation (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the reflective film in combination with window glass motivated by the desire to reduce heat, glare of solar radiation.

Applicant argues that Murphy fails to teach the window glass suitable for use in vehicular or architectural glazing element. It is recognized that "suitable for use in vehicular or architectural glazing element" is an intended use limitation. It has been held that a recitation with respect to the manner in which a claimed window glass is intended to be employed does not differentiate the claimed window glass from a prior window glass satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Mere recitation of "suitable for use in vehicular or architectural glazing element" impacts no definite structure to the claimed window glass and is therefore found inadequate to convey structure in any patentable sense.

# Allowable Subject Matter

- 9. Claims 24-27, 34 and 40 are allowed.
- 10. Claims 16, 23, 30, 36, 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The inclusion of an optically clear laminate renders the claims unobvious over the prior art. The

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laminate of Hutchison comprises a silver layer having a thickness in the range from 1000 nm to 1500 nm to provide an *opaque* specularly reflective metallic surface (column 7, lines 61-65). Likewise, it is clearly apparent that the laminate of Hutchison will not be optically clear due to the presence of a thick silver layer. It is noted that in accordance with Applicant's specification, the "optically clear" means that the laminate exhibits a light transmittance of at least about 75%. Since the laminate of Hutchison is not optically clear for the reasons set forth above, the laminate of Hutchison would not inherently exhibit the light transmission of at least about 75% as required by the claims.

# Response to Arguments

11. The art rejections set forth in the 06/17/2004 Examiner Answer and the 03/22/2005 Office Action have been maintained in view of the present amendment and response. Applicant argues that Murphy fails to teach the window glass suitable for use in vehicular or architectural glazing element. It is recognized that "suitable for use in vehicular or architectural glazing element" is an intended use limitation. It has been held that a recitation with respect to the manner in which a claimed window glass is intended to be employed does not differentiate the claimed window glass from a prior window glass satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Mere recitation of "suitable for use in vehicular or architectural glazing element" impacts no definite structure to the claimed window glass and is therefore found

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inadequate to convey structure in any patentable sense. Accordingly, the art rejections are sustained.

#### Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax

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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

Hai Vo

HAIVO PRIMARY EXAMINER